

ATTACHMENT D

2012 MS4 PERMIT IMPLEMENTATION

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Summary of the Implementation of the 2012 MS4 Permit Requirements

This Attachment contains information about the County's activities with respect to the following:

Discharge Prohibitions.....	D-1
Watershed Management Programs Activities	D-1
Minimum Control Measures	D-2
Coordinated Integrated Monitoring Program Activities	D-2
Responses to 2012 MS4 Permit Attachment E Part XVIII	D-3

Discharge Prohibitions

By ordinance, the County of Los Angeles (County) prohibits all non-authorized non-stormwater discharges through its MS4 and the discharge of irrigation overspray. The County also conducts public outreach to its local drinking water customers on water conservation practices and programs.

In March 2014, the County sent a letter to drinking water suppliers in Los Angeles County to reiterate the MS4 Permit requirements for their discharges. This letter served as a reminder of their responsibility to give prior notification, implement BMPs, monitor, and maintain records.

In November 2014, a second letter was sent to the drinking water suppliers requesting submittal of records for each of their discharges over 100,000 gallons from December 28, 2012, to June 30, 2014. As of the submittal date of this Annual Report, we are continuing to receive information in response to this request. The County, in collaboration with the Los Angeles County Flood Control District, will evaluate any available monitoring data for these drinking water discharges to determine if they may be a source of pollutants. If it is determined that these discharges have caused or contributed to an exceedance of Receiving Water Limitations or Water Quality Based Effluent Limitations, the Regional Board will be notified pursuant to the MS4 Permit. A summary of these actions will be included in future Annual Reports.

The County has continued to work with the LACFCD, a representative group of drinking water suppliers, and Regional Board staff on a draft Memorandum of Understanding (MOU) and related BMP Manual as a means to manage drinking water discharges in accordance with the 2012 Permit. While some progress has been made, as of the submittal date of this Annual Report, final consensus on the terms of the MOU and content of the BMP Manual has not been reached and the documents have not yet been finalized. The County will continue discussion with the LACFCD, other dischargers, and the Regional Board staff with the goal of reaching agreement on the remaining outstanding issues.

Watershed Management Programs Activities

The 2012 MS4 Permit allows permittees the option to customize their stormwater programs to achieve compliance with certain receiving water limitations and water quality-based effluent limits by implementing an Enhanced Watershed Management Program (EWMP) or Watershed Management Program (WMP). The EWMP will use integrated planning to comprehensively evaluate opportunities for multi-benefit regional projects that capture non-stormwater and stormwater runoff for beneficial use. In addition, the EWMP and WMP will include customized strategies, a Coordinated Integrated Monitoring Program, and Best Management Practices based on Reasonable Assurance Analysis.

EWMPs

In June 2014, the County, along with other agencies, submitted to the Regional Board EWMP Work Plans for the following groups:

1. Upper Santa Clara River Watershed Group
2. Upper Los Angeles River Watershed Group
3. Rio Hondo/San Gabriel River Water Quality Group
4. Upper San Gabriel River EWMP Group
5. Malibu Creek Watershed Group
6. Marina del Rey Watershed Group
7. North Santa Monica Bay Coastal Watersheds Group
8. Santa Monica Bay Jurisdictional Groups 2 and 3
9. Peninsula EWMP Agencies
10. Ballona Creek Watershed Group
11. Dominguez Channel Watershed Management Area Group

The County is the coordinating agency for the Marina del Rey Watershed and Upper San Gabriel River EWMP Groups.

WMP

In June 2014, the County, along with the Los Angeles County Flood Control District, submitted a WMP Plan for the Alamitos Bay/Los Cerritos Channel Group. The County is the coordinating agency for the aforementioned WMP Group.

Technical Advisory Committee

The County participated in the Technical Advisory Committee and attended all meetings that were held during this reporting period.

Stakeholder Outreach

The County participated in stakeholder outreach meetings for each of the groups to inform interested stakeholders of the WMP/EWMP process and to solicit project ideas for each of the watershed management areas.

Minimum Control Measures

The County of Los Angeles (County) continues to implement its stormwater quality management program (SQMP), now referred to as the Minimum Control Measures (MCMs), as required under the 2001 MS4 Permit. The County will continue to implement its SQMP until the Watershed Management Programs and Enhanced Watershed Management Programs the County is participating in are approved by the Regional Board. In the meantime, the County is developing strategies, procedures, and manuals for implementation of the MCMs required by the 2012 MS4 Permit.

Coordinated Integrated Monitoring Program Activities

In June 2014, the County along with other agencies submitted draft Coordinated Integrated Monitoring Program (CIMP) Plans in June 2014 for the following groups:

1. Upper Santa Clara River Watershed Group
2. Upper Los Angeles River Watershed Group
3. Rio Hondo/San Gabriel River Water Quality Group
4. Upper San Gabriel River EWMP Group
5. Malibu Creek Watershed Group
6. Marina del Rey Watershed Group
7. North Santa Monica Bay Coastal Watersheds Group
8. Santa Monica Bay Jurisdictional Groups 2 and 3
9. Peninsula EWMP Agencies
10. Ballona Creek Watershed Group
11. Dominguez Channel Watershed Management Area Group
12. Alamitos Bay/Los Cerritos Channel Group

The County is the coordinating agency for the Upper San Gabriel River EWMP Group, Marina del Rey Watershed Group and the Alamitos Bay/Los Cerritos Channel Group.

Although the draft CIMP Plans are still being reviewed, the Upper San Gabriel River EWMP Group has begun implementing the Non-Stormwater Screening portion of its draft CIMP in order to meet interim source identification milestones and Bacteria TMDL requirements in the 2012 MS4 Permit. Per the commitment made in the draft CIMP that was submitted to the Regional Board, this Annual Report includes a summary of the efforts to date; see Exhibit 1 of this attachment.

Responses to 2012 MS4 Permit Attachment E Part XVIII

XVIII.A.1 Storm Water Control Measures

- a. Effective Impervious Area and change in storm water runoff volume during the 85th percentile storm event

Estimating changing in Effective Impervious Area is difficult as the County is not provided all information regarding change in EIA. However, the County does require applicable new- and re-development projects to minimize impervious surface area.

- b. Summary of New Development/Re-development Projects constructed within the Permittee's jurisdictional area during the reporting year.

The County issued 22 grading permits to applicable projects during this reporting period. These projects - ranging from residential and commercial developments to parking lots and retail gasoline outlets - were required to incorporate storm water control measures to retain runoff on-site as required under the 2012 MS4 Permit.

- c. Summary of Retrofit Projects that reduced or disconnected impervious areas from the MS4 during the reporting year.

During this reporting period, the County completed three retrofit projects that reduced or disconnected impervious areas from the MS4:

- **In August 2013, the County completed* the construction of the Woodbury Road Median Landscaping Project (RDC0015442). The project included the construction of median bioswales with curb openings and permeable concrete.**

- **In September 2013, the County completed* the construction the 2nd Street, Et Al. Project (RDC0015812). The project included the construction of tree well bioretention filtration units.**
- **In December 2013, the County completed* the construction the Del Aire & El Camino Village, Et Al. Phase II Project (RDC0015501). The project included the construction of a bioretention swale.**

*** Project completion was based on the date of final field acceptance.**

- d. Summary of other projects designed to intercept storm water runoff prior to discharge to the MS4 during the reporting year.

Aside from those summarized above for question “c”, the County did not construct projects to intercept stormwater runoff prior to discharge to the MS4.

e. For the projects summarized above in 1.b through 1.d, estimate the total runoff volume retained on site by the implemented projects.

Project Type	Location	Reference ID	Runoff volume retained onsite ⁽¹⁾ [cubic feet]
New Development / Redevelopment Projects⁽²⁾			
Residential	Southwest District Office Area	BL1302250031	1,307
Commercial	LACDPW HQ AED Area	GR1306240002	1,985
Parking Lot	LACDPW HQ AED Area	GR1309190003	3,620
Parking Lot	SCV District Office Area	GR1109080004	3,364
Commercial	South Whittier District Office Area	GR1109260001	652
Parking Lot	Southwest District Office Area	GR1209270004	3,352
Commercial	Southwest District Office Area	GR1211060001	2,580
Commercial	Southwest District Office Area	GR1212240001	1,617
Commercial	Southwest District Office Area	GR1303280002	7,699
Commercial	South Whittier District Office Area	GR1305100001	3,680
Commercial	SGV District Office Temp	GR1305140002	579
Commercial	SGV District Office Temp	GR1305230006	693
Industrial	Carson District Office Area	GR1305300001	3,000
Parking Lot	LACDPW HQ AED Area	GR1306200002	2,715
Residential	Southwest District Office Area	GR1307020002	1,829
Commercial	SGV District Office Temp	GR1307110003	600
Commercial	Southwest District Office Area	GR1308130001	3,484
Commercial	LACDPW HQ AED Area	GR1309040002	700
Residential	East LA District Office Area	GR1310230003	1,267
	SGV District Office Temp	GR1310250001	12,972
Parking Lot	Southwest District Office Area	GR1311120003	1,960
Commercial	LACDPW HQ BSD Area	GR1205150002	16,886
Retrofit Projects			
Road Project	Woodbury Road	RDC0015442	6510
Road Project	2nd Street, et al	RDC0015812	448
Road Project	Workman Mill Road	RDC0014493	23,291

(1) Design volumes of the control measures

(2) Permitted projects

f. Summary of actions taken in compliance with TMDL implementation plans or approved Watershed Management Programs to implement TMDL provisions in Part VI.E and Attachments L-R of this Order

Please see Attachment J for a summary of TMDL related activities. Also see response to question “i” below.

g. Summary of riparian buffer/wetland restoration projects completed during the reporting year.

During this reporting year, the County did not complete any riparian buffer or wetland restoration projects.

h. Summary of other Minimum Control Measures implemented during the reporting year, as the Permittee deems relevant.

Please see Form U-4.

i. Status of multi-year efforts that were not completed in the current year and will therefore continue into subsequent years

Project Name	Description
Marina del Rey Library Parking Lot Project	The project will include the construction of LID type BMPs at the Library Parking Lot. The project is expected to be completed by December 2017.
Marina del Rey Parking Lot 5 Improvements Project	This project consisted of retrofitting Marina del Rey Parking Lot 5 with LID-type BMPs. This project was completed in September 2014, after the end of this reporting year.
Marina del Rey Parking Lot 7 Improvements Project	Retrofit parking lot with LID-type BMPs. This project was completed in September 2014, after the end of this reporting year.
Marina del Rey Parking Lot 9 Improvements Project	Construct LID type BMPs at the Parking Lot. Expected to be completed by December 2016
Oxford Retention Basin Multi-use Enhancement Project	This project is an enhancement of the existing Oxford Retention Basin. The project will improve circulation within the basin, enhance flood protection, improve the quality of plant and wildlife habitat within the facility, and provide aesthetic and recreational enhancements. Construction is expected to begin in December 2014.

XVIII.A.2 Effectiveness Assessment of Storm Water Control Measures

a. Rainfall summary for the reporting year

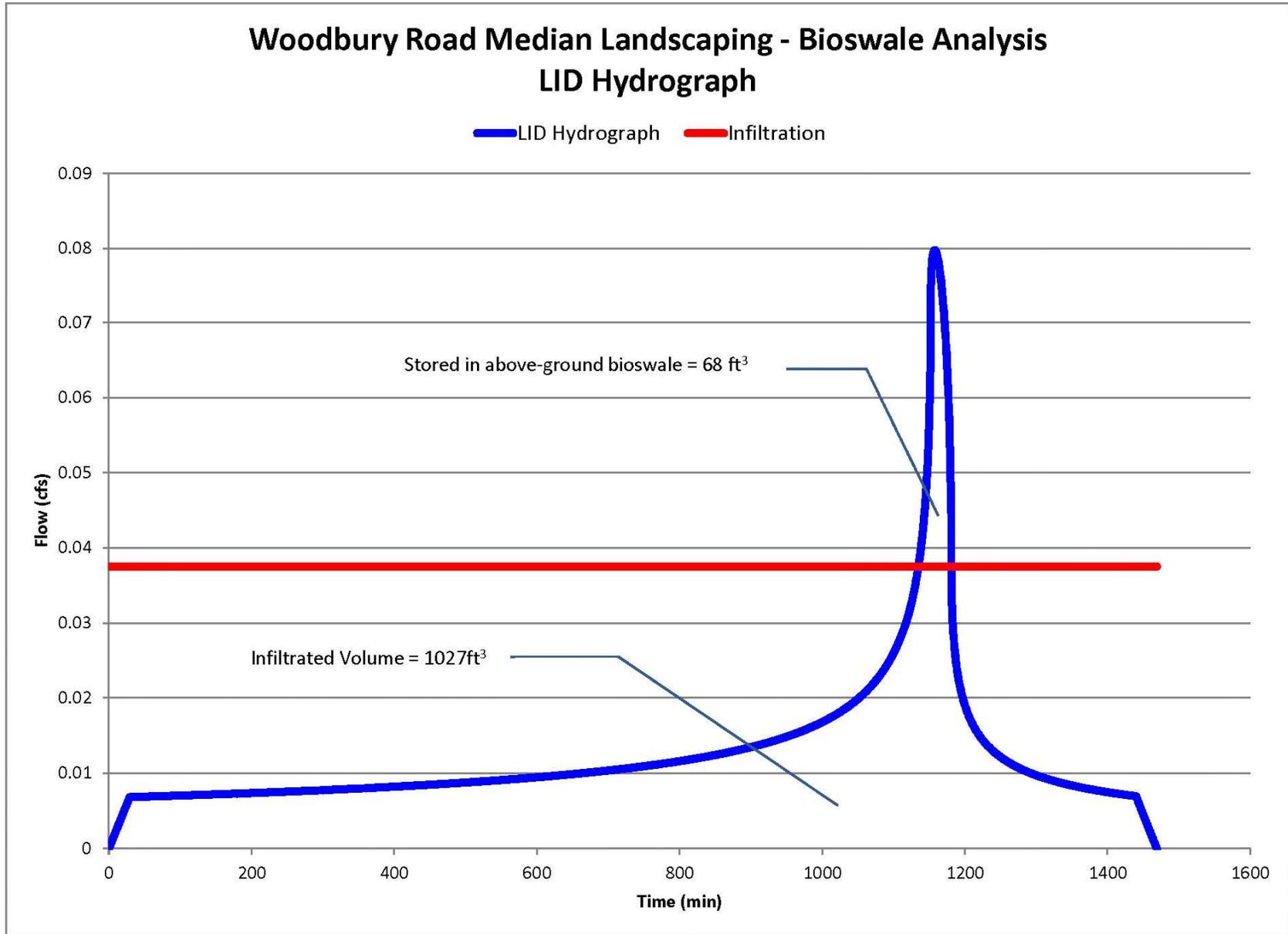
Please refer to the LACFCD’s Annual Report for rainfall data throughout the County. Rainfall summary will be included in future reports on a watershed-basis once CIMP implementation has begun.

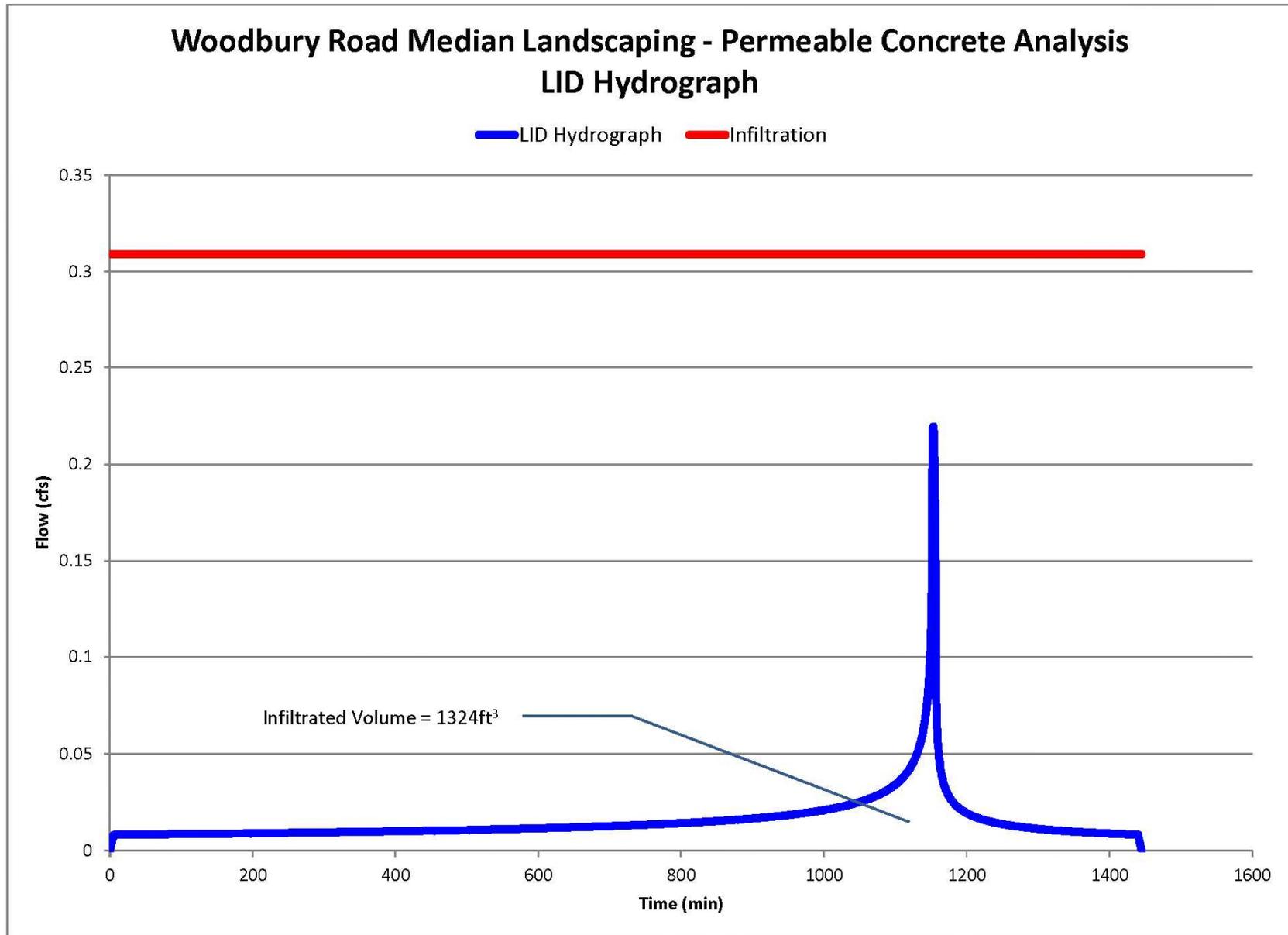
b. Provide a summary table describing rainfall during storm water outfall and wet-weather receiving water monitoring events.

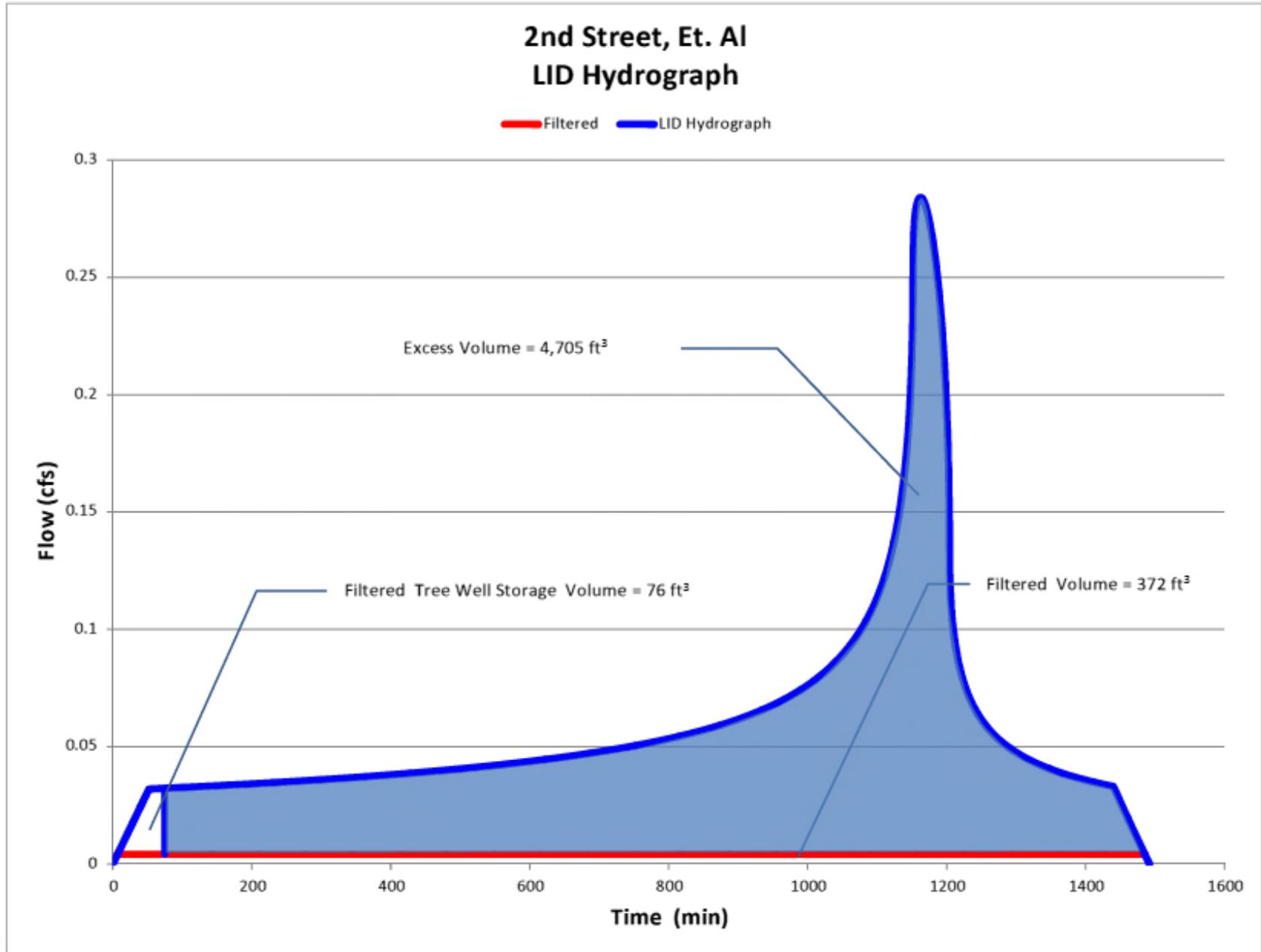
This information will be provided on a watershed-basis after CIMP implementation begins.

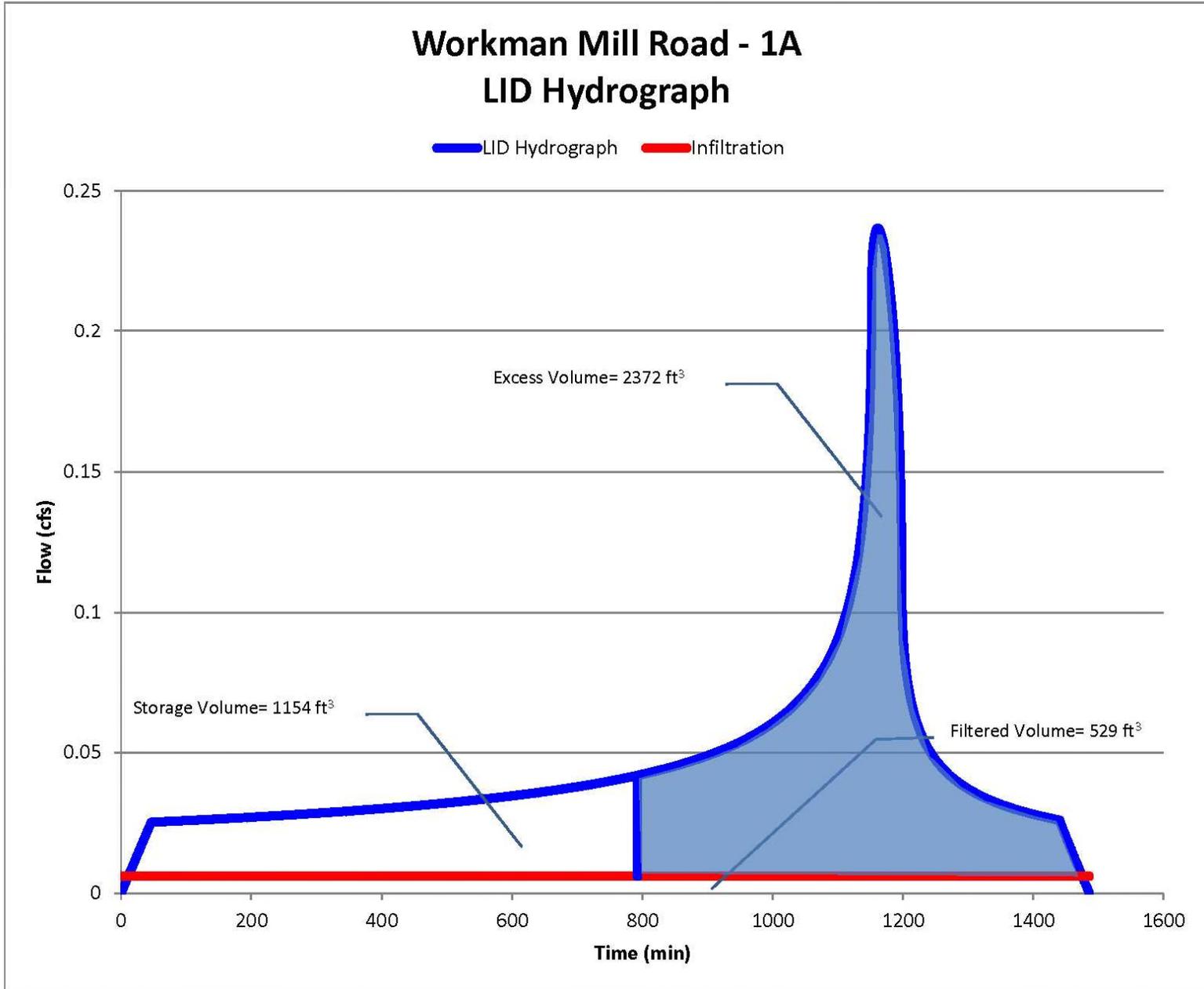
c. Where control measures were designed to reduce impervious cover or storm water peak flow and flow duration, provide hydrographs and flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event, if available

The following pages contain available hydrographs or flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event where control measures were designed to reduce impervious cover or storm water peak flow and flow duration

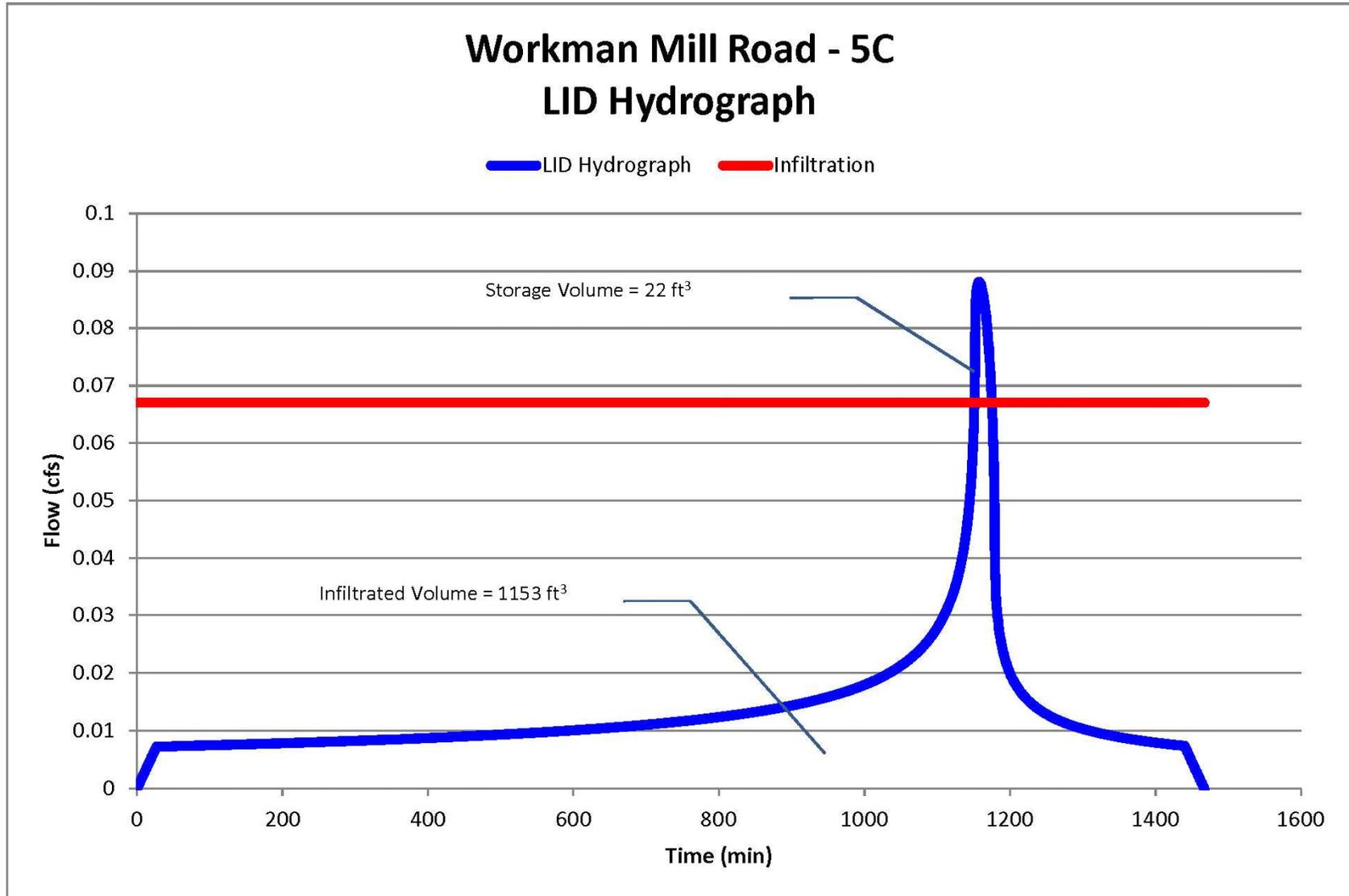












- c. For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for subwatershed under current conditions

Reference flow duration curves have not been developed for the various watersheds with natural drainage systems. The County expects this will be done as part of the next reporting year's watershed-specific annual reporting to be prepared by the WMP and EWMP Groups.

- d. Provide an assessment as to whether the quality of storm water discharges as measured at designed outfalls is improving, staying the same, or declining.

Outfall monitoring had not begun as of June 30, 2014. This assessment will be completed in future reporting years.

- e. Provide an assessment as to whether wet-weather receiving water quality within the jurisdiction of the Permittee is improving, staying the same, or declining, when normalized for variations in rainfall patterns.

- f. **As a subjective assessment, wet weather receiving water quality appears to be staying the same. It is expected that more detailed analyses will be performed on a watershed basis in future watershed-based annual reports after a consistent assessment framework and approach has been established among the various WMP and EWMP groups.**

- g. Status of multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s).

Please refer to XVIII.A.1.i above.

XVIII.A.3. Non-Storm Water Control Measures

- a. thru g. Outfall screening

See Attachment D Exhibit 1 for the status of the outfall screening by the Upper San Gabriel River EWMP Group

- h. Status of multi-year efforts to be continued in subsequent years

As part of the Los Angeles River Bacteria TMDL Load Reduction Strategy for Segment B, during this reporting period, the County completed the assessment of the outfall drainage area for the unincorporated areas tributary to Segment B. The Final Load Reduction Strategy Report will be submitted to the Regional Board by June 30, 2015.

XVIII.A.4. Effectiveness Assessment of Non-Storm Water Control Measures

- a. Provide an assessment as to whether receiving water quality within the jurisdiction of the Permittee is impaired, improving, staying the same, or declining during dry-weather conditions

Receiving water quality is variable from year to year and subject to a number of factors. Efforts to control non-stormwater discharges have resulted in noticeable improvements in dry weather receiving water quality in some but not in others. Where water quality has not improved, the County is committed to continued efforts including through the WMP/EWMP adaptive management process to implement additional control measures where appropriate.

- b. Provide an assessment of the effectiveness of the Permittee's control measures effectively prohibiting non-storm water discharges through the MS4 to receiving waters

The County prohibits the discharge of non-exempt non-stormwater runoff through its MS4. The outfall screening program is expected to further reduce non-exempt discharges through the MS4.

- c. Status of multi-year efforts to be continued in subsequent years

Please refer to XVIII.A.1.i above.

XVIII.A.5. Integrated Monitoring Compliance Report

Please refer to Attachment C of this Annual Report, which contains the County's Receiving Water Limitations Status Report.

XVIII.A.6. Adaptive Management Strategies

- a. Identify the most effective control measures and describe why the measures were effective and how other control measures will be optimized based on past experiences.

Generally speaking, control measures that eliminate runoff (by retention, infiltration, or diversion to a treatment facility) are the most effective. BMP optimization is currently done in an informal manner based on experience and will be further addressed during the adaptive management process.

- b. Identify the least effective control measures and describe why the measures were deemed ineffective and how the control measures will be modified or terminated.

Assessing the effectiveness of programmatic control measures i.e. minimum control measures, continues to be a challenge; the County looks forward to working with CASQA and Regional Board staff to utilize some of the assessment techniques in CASQA's forthcoming Program Effectiveness Assessment Manual to evaluate the effectiveness of programmatic controls.

- c. Identify significant changes to control measures during the prior year and the rationale for the changes.

The County did not make significant changes during this reporting period.

- d. Describe all significant changes to control measures anticipated to be made in the next year and the rationale for the changes. Those changes requiring approval of the Regional Water Board or its Executive Officer shall be clearly identified at the beginning of the Annual Report.

Any proposed changes are included in the WMP or EWMP plans.

- e. Include a detailed description of control measures to be applied to New Development or Re-development projects disturbing more than 50 acres.

During this reporting year, two new- or re-development projects disturbing more than 50 acres had grading plans approved. One project will include the construction of an infiltration basin; the other will include the construction of two continuous deflective separation units.

- f. Provide the status of all multi-year efforts that were not completed.

None at this time.

XVIII.A.7. Supporting Data and Information

- a. All monitoring data and associated meta data used to prepare the Annual Report shall be summarized in an Excel spreadsheet and sorted by watershed, subwatershed and monitoring station/outfall identifier linked to the subwatershed map. The data summary must include the date, sample type (flow-weighted composite, grab, field measurement), sample start and stop times, parameter, analytical method, value, and units. The date field must be linked to a database summarizing the weather data for the sampling date including 24-hour rainfall, rainfall intensity, and days since the previous rain event.

For available information, please refer to Attachment J Summary of TMDL Related Activities. The County will work with its WMP and EWMP partners on the compilation of pertinent monitoring data and associated meta data used to prepare future watershed-specific annual reports.

- b. Optional. The Permittee may at its option, provide an additional detailed summary table describing control measures that are not otherwise described in the reporting requirements.

None at this time.